



Intelligent Transportation Systems
U.S. Department of Transportation

www.its.dot.gov

safety

mobility

productivity



The National ITS Architecture and ITS Standards define the framework and interconnections guiding deployment of ITS in the U.S. for the next 20 years and beyond.

For more information on how to get started with the National ITS Architecture and ITS Standards, visit us at:

www.its.dot.gov/arch
www.standards.its.dot.gov/standards

Lee Simmons
ITS Joint Program Office
lee.simmons@fhwa.dot.gov

For more information about the US DOT ITS program:

866.367.7487
itshelp@fhwa.dot.gov
ITS Joint Program Office
400 7th Street, SW, Room 3416
Washington, DC 20590

ITS Architecture and Standards

Bringing Structure to Growth

Intelligent Transportation Systems (ITS) allow us to operate and manage the transportation network as a single, comprehensive system. In the same way that an asphalt road must be built on a well-packed surface, ITS must be built upon a uniform architecture and be based upon uniform, open standards.

At the heart of ITS is the integration of many transportation systems that exchange information to optimize their individual performance and operate in coordination. The National ITS Architecture helps public agencies define a framework upon which transportation projects can be developed and integrated into a regional transportation system. On the US DOT's ITS Architecture website, the latest version of the National ITS Architecture gives users guidance on how much and what kind of information a traffic management center needs to produce and with what agencies it needs to share the information. The Architecture does not prescribe technologies, designs, or policies; instead, it describes how ITS centers, systems, and devices should relate to each other. Using the National ITS Architecture can save significant time for local project planners and implementers and minimize risks associated with deploying a new transportation system or expanding an existing one.

ITS Standards are industry-consensus standards that define how system components interact within the National ITS Architecture. By openly specifying how systems and components interconnect, ITS Standards promote interoperability. To expedite deployment of nationally interoperable ITS systems and services, the US DOT supports specific ITS standards activities, especially in areas that have significant public benefit.

ITS Standards will help create and sustain markets by increasing the possibility that manufacturers will produce products that match buyers' needs and specifications. Buyers will benefit from a wider selection of products built to the same interface standards from competing manufacturers. Buyers who purchase standardized products will also be assured that they are not being locked into a proprietary solution. Today, the ITS Standards program is supporting the US DOT's major ITS initiatives by demonstrating the value of the inclusion of standards as a part of ITS networks. The standards website keeps you posted on the latest standards developments and provides useful links, including standards training and technical assistance.

Will You Be Ready for the Future?

We can help you understand your architecture and standards alternatives and plan for a smarter future.

- The National ITS Architecture can help you define the scope of ITS projects and assist in planning ITS in your region, while giving you the level of detail needed to convey your ITS vision to regional stakeholders.
- The implementation of ITS Standards will give you the flexibility to choose and build the ITS products that meet your needs, not the manufacturers', giving you choices and a broader marketplace of products to choose from.



U.S. Department of
Transportation